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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/707,059

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Hsien-Chung Lin

ACMP0041USA

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08/12/2005

NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION  
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EXAMINER

HUYNH, CHUCK

ART UNIT

PAPER NUMBER

2683

DATE MAILED: 08/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/707,059	LIN, HSIEN-CHUNG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chuck Huynh	2683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 1, 3, 5, 6, 8, 9, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Lieber.

Regarding claim 1, Lieber discloses a method for controlling light sources of a keypad of a telephone, the telephone comprising a plurality of keys, and a plurality of light sources installed correspondingly to the plurality of keys, and the method comprising:

detecting an operating status of the telephone (Col 1, lines 16-29); and

determining possibly enabled functions and changing at least one part of the light sources from a first status to a second status according to the possibly enabled functions, in order to show at least one key corresponding to the possibly enabled functions (Col 1, lines 16-39).

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Regarding claim 3, it is inherent that when a key is illuminated that it goes from a dimmer state to a brighter state; therefore the method of claim 1 wherein the first status and the second status are different levels of brightness is inherent.

Regarding claim 5, Lieber discloses the method of claim 1 wherein the first status is no lighting and the second status is blinking (Col 3, lines 3-6).

Regarding claim 6, Lieber discloses the method of claim 1 wherein the first status is continuous lighting and the second status is no lighting (Col 3, lines 13-19).

Regarding claim 8, Lieber discloses an electronic apparatus comprising:  
a plurality of keys corresponding to at least one specific function respectively for inputting data (Col 1, lines 22-24);

a plurality of light sources installed correspondingly to the plurality of keys (Col 1, lines 17-24);

a status detecting device for detecting an operating status of the electronic apparatus (Col 1, lines 24-39); and

an controller for determining possibly enabled functions and changing the status of at least one part of the light sources according to the possibly enabled functions, in order to show at least one key corresponding to the possibly enabled functions (Col 1, lines 30-39; Col 3, lines 3-19).

Regarding claim 9, Lieber discloses the electronic apparatus of claim 8 wherein the controller makes the light source corresponding to at least one key corresponding to the possibly enabled functions in a blinking status (Col 3, lines 3-6).

Regarding claim 15, Lieber discloses the electronic apparatus of claim 8 being a telephone (Abstract).

2. Claim 16 -18 is rejected under 35 U.S.C. 102(b) as being anticipated by Kaikuranta et al. (hereinafter Kaikuranta).

Regarding claim 16, Kaikuranta discloses an electronic apparatus comprising:

a first key capable of enabling a first function of the electronic apparatus (Page 6, [0054]);

a second key capable of enabling a second function of the electronic apparatus (Page 6, [0054]);

a first light source installed near the first key for lighting up the first key (Page 6, [0054]);

a second light source installed near the second key for lighting up the second key (Page 6, [0054]);

a status detecting device for determining whether the first function or the second function can be enabled according to an operating status of the electronic apparatus (Page 6, [0054]); and

a controller for driving the first light source or the second light source according to an information provided by the status detecting device (Page 6, [0054]);

wherein when the status detecting device determines that the first function can be enabled and the second function is prevented to be enabled, the controller keeps light intensity of the second light source in a stable status and varies the light intensity of the first light source to identify the position of the first button (Page 6, [0054]).

Regarding claim 17, Kaikuranta discloses the electronic apparatus of claim 16 being a telephone (Page 1, [002]).

Regarding claim 18, Kaikuranta discloses a method of controlling light sources of a keypad of a electronic device, the electronic device comprising:

a first key capable of enabling a first function of the electronic apparatus (Page 6, [0054]);

a second key capable of enabling a second function of the electronic apparatus (Page 6, [0054]);

a first light source installed near the first key for lighting up the first key (Page 6, [0054]);

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a second light source installed near the second key for lighting up the second key  
(Page 6, [0054]);

the method comprising steps of:

determining whether one of the first function and the second function can be  
enabled according to an operational status of the electronic device (Page 6, [0054]);  
and

keeping of the second light source in a stable (not illuminated) status and varying  
light intensity of the first light source to identify the position of the first button, when the  
first function can be enabled and the second function is prevented to be enabled under  
the operating status (Page 6, [0054]).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2, 4, 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable  
over Lieber in view of Oota et al. (hereinafter Oota).

Regarding claim 2, Lieber discloses all the particulars of the claim but is not clear on the method of claim 1 wherein the first status and the second status are different colors.

However, Oota does disclose the method of claim 1 wherein the first status and the second status are different colors (Page 3, [0041]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Kabushiki's disclosure to provide different color illuminations.

Regarding claim 4, Lieber discloses all the particulars of the claim but is not clear on the method of claim 1 wherein the first status is no lighting and the second status is continuous lighting.

However, Oota does disclose the method of claim 1 wherein the first status is no lighting and the second status is continuous lighting (Page 3, [0041]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Oota's disclosure to provide notification to user.

Regarding claim 10, Lieber discloses all the particulars of the claim except the electronic apparatus of claim 8 wherein the controller makes the light source corresponding to at least one key corresponding to the possibly enabled functions in a continuous lighting status.



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However, Oota does disclose wherein the controller makes the light source corresponding to at least one key corresponding to the possibly enabled functions in a continuous lighting status (Page 3, [0041]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Oota's disclosure to provide notification to user.

Regarding claim 11, Lieber discloses all the particulars of the claim except the electronic apparatus of claim 8 wherein each light source can generate light in different colors.

However, Oota does disclose wherein each light source can generate light in different colors (Page 3, [0041]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Kabushiki's disclosure to provide different color illuminations.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lieber in view of Toki et al. (hereinafter Toki).

Regarding claim 7, Lieber discloses all the particulars of the claim except the method of claim 1 wherein the first status is continuous lighting and the second status is blinking.

However, Toki does disclose wherein the first status is continuous lighting and the second status is blinking.

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It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Toki's disclosure to provide a different state of visual notification.

6. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Lieber in view of Oota in further view of Sung.

Regarding claim 12, Lieber in view of Oota discloses all the particulars of the claim but might be unclear on the electronic apparatus of claim 11 wherein the controller makes the light source corresponding to at least one key corresponding to the possibly enabled functions in a color changing status.

However, Sung does disclose wherein the controller makes the light source corresponding to at least one key corresponding to the possibly enabled functions in a color changing status (Abstract; Page 1, [0014]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Sung's disclosure to provide different visual state notification.

7. Claim 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lieber in view of Hull et al. (hereinafter Hull).

Regarding claim 13, Lieber discloses all the particulars of the claim except the electronic apparatus of claim 8 wherein each light source can generate light in different levels of brightness.

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However, Hull does disclose wherein each light source can generate light in different levels of brightness (Col 5, lines 66-67 – Col 6, lines 1-2).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Hull's disclosure to provide different state of visual notification.

Regarding claim 14, Hull discloses the electronic apparatus of claim 13 wherein the controller makes the light source corresponding to at least one key corresponding to the possibly enabled functions in a brightness level changing status.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Huynh whose telephone number is 571-272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chuck Huynh



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